

COMMONWEALTH OF VIRGINIA  
STATE AIR POLLUTION CONTROL BOARD  
REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9 VAC 5 CHAPTER 60.  
HAZARDOUS AIR POLLUTANT SOURCES.

PART II.  
Emission Standards.

ARTICLE 3.  
Control Technology Determinations for  
Major Sources of Hazardous Air Pollutants (Rule 6-3).

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9 VAC 5-60-120.    Applicability.

A.     The provisions of this article apply to any owner of an affected source within a source category or subcategory for which the administrator has failed to promulgate a MACT standard by the § 112(j) deadline.

B.     The provisions of this article apply throughout the Commonwealth of Virginia.

C.     The provisions of this article do not apply to research or laboratory activities.

D.     If federal operating permit program applicability has been deferred for a source category, the provisions of this article shall not apply for sources in that category until those sources become subject to federal operating permit requirements.

E.     The procedures in this article apply for each affected source only after the § 112(j) deadline for the source category or subcategory in question has passed, and

only until such time as a generally applicable emission standard governing that source has been promulgated. Once a generally applicable emission standard governing that source has been promulgated, the owner of the affected source and the board are not required to take any further actions to develop an equivalent emission limitation under this article.

F. Any final equivalent emission limitation for an affected source which is issued by the board pursuant to this article prior to promulgation of a generally applicable emission standard governing that source shall be deemed an applicable federal requirement adopted pursuant to § 112(j) of the federal Clean Air Act. Each such equivalent emission limitation shall take effect upon issuance of the federal operating permit containing that limitation, and shall remain applicable to the source until such time as it may be revised or supplanted pursuant to the procedures established by this article. Such a final equivalent emission limitation, and all associated requirements adopted pursuant to 9 VAC 5-60-140 F 2, are directly enforceable under federal law regardless of whether any permit in which they may be contained remains in effect.

#### 9 VAC 5-60-130. Definitions.

A. For the purpose of applying this article in the context of the Regulations for the Control and Abatement of Air Pollution and related uses, the words or terms shall have the meaning given them in subsection C of this section.

B. As used in this article, all terms not defined herein shall have the meaning given them in 9 VAC 5 Chapter 10 (9 VAC 5-10), unless otherwise required by context.

C. Terms defined.

“Administrator” means the Administrator of the United States Environmental Protection Agency or his authorized representative.

“Affected source” means the collection of equipment, activities, or both within a single contiguous area and under common control that is in a source category or subcategory under § 112(c) of the federal Clean Air Act for which the administrator has failed to promulgate a MACT standard by the § 112(j) deadline, and that is addressed by an applicable MACT emission limitation established pursuant to this article.

“Affected states” means all states (i) whose air quality may be affected and that are contiguous to the Commonwealth of Virginia, and (ii) whose air quality may be affected and that are within 50 miles of the major source for which a MACT determination is made in accordance with 40 CFR Part 63.

“Alternative emission limitation” means conditions established pursuant to §

112(i)(5) or § 112(i)(6) of the federal Clean Air Act by the administrator or the board.

“Alternative emission standard” means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner to the administrator’s satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under 40 CFR Part 63 pursuant to § 112(h) of the federal Clean Air Act.

“Area source” means any stationary source of hazardous air pollutants that is not a major source.

“Available information” means, for purposes of conducting a MACT floor finding and identifying control technology options for affected sources subject to the provisions of this article, any information that is available as of the date on which the first Part 2 MACT application is filed for a source in the relevant source category or subcategory, and, pursuant to the requirements of this article, is additional relevant information that can be expeditiously provided by the board or administrator, is submitted by the applicant or others prior to or during the public comment period on the equivalent emission limitation for that source under § 112(j) of the federal Clean Air Act, or information contained in the following information sources:

1. A relevant proposed regulation, including all supporting information.
2. Relevant background information documents for a draft or proposed regulation.
3. Any relevant regulation, information, or guidance collected by the board or administrator establishing a MACT floor finding or a case-by-case MACT determination.
4. Relevant data and information available from the Clean Air Control Technology Center developed pursuant to § 112(l)(3) of the federal Clean Air Act.
5. Relevant data and information contained in the Aerometric Informational Retrieval System (AIRS).
6. Any additional information that can be expeditiously provided by the board or administrator.
7. Any information provided by applicants in an application for a federal operating permit, permit modification, administrative amendment, or hazardous air

pollutant new source review permit pursuant to the requirements of this article.

8. Any additional relevant information provided by the applicant.

“Case-by-case MACT determination” means a determination by the board, pursuant to the requirements of this article, which establishes a MACT emission limitation, MACT work practice standard, or other MACT requirements for an affected source subject to this article.

“Commenced” means, with respect to construction or reconstruction of an affected source, that an owner has undertaken a continuous program of construction or reconstruction or that an owner has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

“Construction” means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner of an existing source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

“Control technology” means measures, processes, methods, systems, or techniques to limit the emission of hazardous air pollutants including, but not limited to, measures which:

1. Reduce the quantity, or eliminate emissions, of such pollutants through process changes, substitution of materials or other modifications;
2. Enclose systems or processes to eliminate emissions;
3. Collect, capture, or treat such pollutants when released from a process, stack, storage or fugitive emissions point;
4. Are design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in 42 USC 7412(h); or
5. Are a combination of subdivisions 1 through 4 of this definition.

“Effective date” means:

1. With regard to an emission standard established under 40 CFR Part 63, the date of promulgation in the Federal Register of such standard; or
2. With regard to an alternative emission limitation or equivalent emission limitation determined by the administrator or board, the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of 40 CFR Part 63.

“Emission point” means any part or activity of a major source that emits or has the potential to emit, under current operational design, any hazardous air pollutant.

“Emission standard” means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of 40 CFR Part 63 pursuant to § 112(d), § 112(h), or § 112(f) of the federal Clean Air Act and incorporated by reference in 9 VAC 5 Chapter 60 (9 VAC 5-60).

“Enhanced review” means a review process containing all administrative steps needed to ensure that the terms and conditions resulting from the review process can be incorporated using federal operating permit program procedures.

“EPA” means the United States Environmental Protection Agency.

“Equivalent emission limitation” means an emission limitation, established under this article, which is equivalent to the emission standard that EPA would have promulgated under § 112(d) or § 112(h) of the federal Clean Air Act.

“Existing source” means any affected source that is not a new source.

“Federal operating permit” means a permit issued under Article 1 (9 VAC 5-80-50 et seq.) or Article 3 (9 VAC 5-80-360 et seq.) of Part II of 9 VAC 5 Chapter 80.

“Federal operating permit program” means the operating permit system established pursuant to Title V of the federal Clean Air Act and regulations codified in Article 1 (9 VAC 5-80-50 et seq.), Article 2 (9 VAC 5-80-310 et seq.), Article 3 (9 VAC 5-80-360 et seq.), and Article 4 (9 VAC 5-80-710 et seq.) of Part II of 9 VAC 5 Chapter 80.

“Federally enforceable” means all limitations and conditions that are enforceable by the administrator and citizens under the federal Clean Air Act or that are enforceable under other statutes administered by the administrator. Federally enforceable limitations and conditions include, but are not limited to the following:

1. Emission standards, alternative emission standards,

alternative emission limitations, and equivalent emission limitations established pursuant to § 112 of the federal Clean Air Act as amended in 1990.

2. New source performance standards established pursuant to § 111 of the federal Clean Air Act, and emission standards established pursuant to § 112 of the federal Clean Air Act before it was amended in 1990.

3. All terms and conditions in a federal operating permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable.

4. Limitations and conditions that are part of an approved implementation plan.

5. Limitations and conditions that are part of a federal construction permit issued under 40 CFR 52.21 or a new source review program permit issued under regulations approved by the EPA into the implementation plan.

6. Limitations and conditions that are part of a state operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

a. The operating permit program has been submitted to and approved by EPA into a state implementation plan (SIP) under § 110 of the federal Clean Air Act;

b. The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;

c. The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable";

d. The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

e. The permit in question was issued only after adequate

and timely notice and opportunity for comment for EPA and the public.

7. Limitations and conditions in a Virginia regulation or program that has been approved by the EPA under subpart E of 40 CFR Part 63 for the purposes of implementing and enforcing § 112 of the federal Clean Air Act.

8. Individual consent agreements that the EPA has legal authority to create.

“Fugitive emissions” means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under § 112 of the Clean Air Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

“Hazardous air pollutant” means any air pollutant listed in § 112(b) of the federal Clean Air Act, as amended by 40 CFR 63.60.

“Hazardous air pollutant new source review permit” means a document issued pursuant to Article 7 (9 VAC 5-80-1400 et seq.) of Part II of 9 VAC 5 Chapter 80 containing all federally enforceable conditions necessary to enforce the application and operation of any maximum achievable control technology or other control technologies such that the MACT emission limitation is met.

“Hazardous air pollutant new source review program” means a program for the preconstruction review and permitting of new stationary sources that emit hazardous air pollutants in accordance with Article 7 (9 VAC 5-80-1400 et seq.) of Part II of 9 VAC 5 Chapter 80, promulgated to implement the requirements of § 112 (relating to permits for hazardous air pollutants) of the federal Clean Air Act.

“Major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the board establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

“Maximum achievable control technology (MACT) emission limitation for existing sources” means the emission limitation reflecting the maximum degree of reduction in emissions of hazardous air pollutants (including a prohibition on such emissions, where achievable) that the board, taking into consideration the cost of achieving such emission reductions, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such a MACT standard applies. This limitation shall not be less stringent than the MACT floor.

“Maximum achievable control technology (MACT) emission limitation for new sources” means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the maximum degree of reduction in emissions of hazardous air pollutants (including a prohibition on such emissions, where achievable) that the board, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such a MACT standard applies.

“Maximum achievable control technology (MACT) floor” means:

1. For existing sources:
  - a. The average emission limitation achieved by the best performing 12% of the existing sources (for which the administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in 9 VAC 5-80-2010) applicable to the source category and prevailing at the time, in the category or subcategory, for categories and subcategories of stationary sources with 30 or more sources; or
  - b. The average emission limitation achieved by the best performing five sources (for which the administrator has or could reasonably obtain emissions information) in the category or subcategory, for a category or subcategory of stationary sources with fewer than 30 sources;
2. For new sources, the emission limitation achieved in practice by the best controlled similar source.

“Maximum achievable control technology (MACT) standard” means:

1. An emission standard;
2. An alternative emission standard;
3. An alternative emission limitation; or
4. An equivalent emission limitation established pursuant to § 112 of the federal Clean Air Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation.



A MACT standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the administrator or board establishes for new or existing sources to which such standard or limitation applies. Every MACT standard established pursuant to § 112 of the federal Clean Air Act includes subpart A of 40 CFR Part 63, as provided by 40 CFR 63.1(a)(4), and all applicable appendices of 40 CFR Part 63 or of other parts of Title 40 of the Code of Federal Regulations that are referenced in that standard.

“Minor new source review (MNSR) permit” means a document issued pursuant to Article 6 (9 VAC 5-80-1100 et seq.) of Part II of 9 VAC 5 Chapter 80 containing all federally enforceable conditions necessary to enforce the application and operation of any best achievable control technology or other requirements such that the applicable requirements are met.

“New affected source” means the collection of equipment, activities, or both, that if constructed after the issuance of a permit for the source pursuant to 9 VAC 5-60-140, is subject to the applicable MACT emission limitation for new sources. Each permit shall define the term “new affected source,” which will be the same as the “affected source” unless a different collection is warranted based on consideration of factors including:

1. Emission reduction impacts of controlling individual sources versus groups of sources;
2. Cost effectiveness of controlling individual equipment;
3. Flexibility to accommodate common control strategies;
4. Cost and benefits of emissions averaging;
5. Incentives for pollution prevention;
6. Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
7. Feasibility and cost of monitoring; and
8. Other relevant factors.

“New source” means any affected source the construction or reconstruction of which is commenced after the administrator first proposes a MACT standard under 40 CFR Part 63 establishing an emission standard applicable to such source.

“New source review program” means a program for the preconstruction review and permitting of new stationary sources or expansions to existing ones in accordance with Article 6 (9 VAC 5-80-1100 et seq.), Article 7 (9 VAC 5-80-1400 et seq.), Article 8 (9 VAC 5-80-1700 et seq.), or Article 9 (9 VAC 5-80-2000 et seq.) of Part II of 9 VAC 5 Chapter 80, promulgated to implement the requirements of §§ 110(a)(2)(c), 112 (relating to permits for hazardous air pollutants), 165 (relating to permits in prevention of significant deterioration areas), and 173 (relating to permits in nonattainment areas) of the federal Clean Air Act.

“Potential to emit” means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is state and federally enforceable. Fugitive emissions count in determining the potential to emit of a stationary source.

“Reconstruction,” unless otherwise defined in a MACT standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

1. The fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable new source; and

2. It is technologically and economically feasible for the reconstructed source to meet the MACT standards established by the administrator (or the board) pursuant to § 112 of the Clean Air Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to MACT standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

“Research or laboratory activities” means activities whose primary purpose is to conduct research and development into new processes and products where such activities are operated under the close supervision of technically trained personnel and are not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner; and where the source is not in a source category, specifically addressing research or laboratory activities, that is listed pursuant to § 112(c)(7) of the federal Clean Air Act.

“Section 112(j) deadline” or “§ 112(j) deadline” means the date 18 months after the date by which a MACT standard is scheduled to be promulgated under 40 CFR Part 63, except that for all major sources listed in the source category schedule for which

a MACT standard is scheduled to be promulgated by November 15, 1994, the § 112(j) deadline is November 15, 1996, and for all major sources listed in the source category schedule for which a MACT standard is scheduled to be promulgated by November 15, 1997, the § 112(j) deadline is December 15, 1999.

“Similar source” means that equipment or collection of equipment that, by virtue of its structure, operability, type of emissions and volume and concentration of emissions, is substantially equivalent to the new affected source and employs control technology for control of emissions of hazardous air pollutants that is practical for use on the new affected source.

“Source category schedule for standards” means the schedule issued pursuant to § 112(e) of the federal Clean Air Act for promulgating MACT standards issued pursuant to § 112(d) of the federal Clean Air Act and published in the Federal Register at 67 FR 6521, February 12, 2002.

9 VAC 5-60-140. Approval process for new and existing affected sources.

A. The requirements of subdivisions 1 and 2 of this subsection apply to major sources that include, as of the § 112(j) deadline, one or more sources in a category or subcategory for which the administrator has failed to promulgate an emission standard under 40 CFR Part 63 on or before an applicable § 112(j) deadline. Existing source MACT requirements (including relevant compliance deadlines), as specified in a federal operating permit issued to the source pursuant to the requirements of this article, shall apply to such sources.

1. The owner shall submit an application for a federal operating permit or for a revision to an existing federal operating permit or a pending federal operating permit meeting the requirements of 9 VAC 5-60-150 A by the § 112(j) deadline if the owner can reasonably determine that one or more sources at the major source belong in the category or subcategory subject to this article.

2. If an application was not submitted under subdivision A 1 of this section and if notified by the board, the owner shall submit an application for a federal operating permit or for a revision to an existing federal operating permit or a pending federal operating permit meeting the requirements of 9 VAC 5-60-150 A within 30 days after being notified in writing by the board that one or more sources at the major source belong to such category or subcategory.

3. The requirements in subdivisions A 3 a through b of this section apply when the owner has obtained a federal operating permit that incorporates a case-by-case MACT determination by the board under the hazardous air pollutant new source review program or has submitted a federal operating permit application for a revision that incorporates a case-by-case MACT determination under the hazardous air

pollutant new source review program, but has not submitted an application for a federal operating permit revision that addresses the emission limitation requirements of this article.

a. When the owner has a federal operating permit that incorporates a case-by-case MACT determination by the board under the hazardous air pollutant new source review program, the owner shall submit an application meeting the requirements of 9 VAC 5-60-150 A for a federal operating permit revision within 30 days of the § 112(j) deadline or within 30 days of being notified in writing by the board that one or more sources at the major source belong in such category or subcategory. Using the procedures established in subsection E of this section, the board will determine whether the emission limitations prescribed pursuant to the prior case-by-case MACT determination under the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe pursuant to this article for the source in question. If the board determines that the emission limitations previously prescribed to effectuate the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe to effectuate this article for the source, then the board will retain the existing emission limitations in the permit as the emission limitations to effectuate this article. The federal operating permit applicable to that source shall be revised accordingly. If the board does not retain the existing emission limitations in the permit as the emission limitations to effectuate this article, the MACT requirements of this article are satisfied upon issuance of a revised federal operating permit incorporating any additional requirements of this article.

b. When the owner has submitted a federal operating permit application that incorporates a case-by-case MACT determination by the board under the hazardous air pollutant new source review program, but has not received the permit incorporating the the hazardous air pollutant new source review program requirements, the owner shall continue to pursue a federal operating permit that addresses the emission limitation requirements of the hazardous air pollutant new source review program. Within 30 days of issuance of that federal operating permit, the owner shall submit an application meeting the requirements of 9 VAC 5-60-150 A for a change to the existing federal operating permit. Using the procedures established in subsection E of this section, the board will determine whether the emission limitations prescribed pursuant to the prior case-by-case MACT determination under the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe pursuant to this article for the source in question. If the board determines that the emission limitations previously prescribed to effectuate the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe to effectuate this article for the source, then the board will retain the existing emission limitations in the permit as the emission limitations to effectuate this article. The federal operating permit applicable to that source shall be revised accordingly. If the board does not retain the existing

emission limitations in the permit as the emission limitations to effectuate this article, the MACT requirements of this article are satisfied upon issuance of a revised federal operating permit incorporating any additional requirements of this article.

B. The requirements of this subsection apply to sources that do not meet the criteria in subsection A of this section on the § 112(j) deadline and are, therefore, not subject to this article on that date, but where events occur subsequent to the § 112(j) deadline that would bring the source under the requirements of this article, and the source does not have a federal operating permit that addresses the requirements of this article.

1. When one or more sources in a category or subcategory subject to the requirements of this article are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does not invoke the hazardous air pollutant new source review program requirements, the owner shall submit an application meeting the requirements of 9 VAC 5-60-150 A within 30 days of startup of the source. This application shall be reviewed using the procedures established in subsection E of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a federal operating permit issued pursuant to the requirements of this article, shall apply to such sources.

2. The requirements in this subdivision apply when one or more sources in a category or subcategory subject to this article are installed at a major source, or result in the source becoming a major source due to the installation, and the installation does require emission limitations to be established and permitted under the hazardous air pollutant new source review program, and the owner has not submitted an application for a federal operating permit revision that addresses the emission limitation requirements of this article. In this case, the owner shall apply for and obtain a federal operating permit that addresses the emission limitation requirements of the hazardous air pollutant new source review program. Within 30 days of issuance of that federal operating permit, the owner shall submit an application meeting the requirements of 9 VAC 5-60-150 A for a revision to the existing federal operating permit. Using the procedures established in subsection E of this section, the board will determine whether the emission limitations prescribed pursuant to the prior case-by-case MACT determination under the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe pursuant to this article for the source in question. If the board determines that the emission limitations previously prescribed to effectuate the hazardous air pollutant new source review program are substantially as effective as the emission limitations which the board would otherwise prescribe to effectuate this article for the source, then the board will retain the existing emission limitations in the permit as the emission limitations to effectuate this article. The federal operating permit applicable to that source shall be revised accordingly. If the board does not retain the existing emission limitations in the permit as the emission limitations to effectuate this article, the MACT requirements of this article are satisfied upon issuance of a revised federal operating permit incorporating any additional

requirements of this article.

3. The owner of an area source that, due to a relaxation in any federally enforceable emission limitation (such as a restriction on hours of operation), increases its potential to emit hazardous air pollutants such that the source becomes a major source that is subject to this article, shall submit an application meeting the requirements of 9 VAC 5-60-150 A for a federal operating permit or for an application for a federal operating permit revision within 30 days after the date that such source becomes a major source. This application shall be reviewed using the procedures established in subsection E of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a federal operating permit issued pursuant to the requirements of this article, shall apply to such sources.

4. After December 1, 2002, if the administrator establishes a lesser quantity emission rate under § 112(a)(1) of the federal Clean Air Act that results in an area source becoming a major source that is subject to this article, then the owner of such a major source shall submit an application meeting the requirements of 9 VAC 5-60-150 A for a federal operating permit or for a change to an existing federal operating permit or pending federal operating permit on or before the date six months after the date that such source becomes a major source. Existing source MACT requirements (including relevant compliance deadlines), as specified in a federal operating permit issued pursuant to the requirements of this article, shall apply to such sources.

C. The requirements of this subsection apply to major sources that include one or more sources in a category or subcategory for which the administrator fails to promulgate an emission standard under 40 CFR Part 63 on or before an applicable § 112 (j) deadline, and the owner has a permit meeting the requirements of this article, and where changes occur at the major source to equipment, activities, or both, subsequent to the § 112(j) deadline.

1. If the federal operating permit already provides the appropriate requirements that address the events that occur under subsection C of this section subsequent to the § 112(j) deadline, then the source shall comply with the applicable new source MACT or existing source MACT requirements as specified in the permit, and the requirements of this article are thus satisfied.

2. If the federal operating permit does not contain the appropriate requirements that address the events that occur under subsection C of this section subsequent to the § 112(j) deadline, then the owner shall submit an application for a revision to the existing federal operating permit that meets the requirements of 9 VAC 5-60-150 A. The application shall be submitted within 30 days of beginning construction and shall be reviewed using the procedures established in subsection E of this section. Existing source MACT requirements (including relevant compliance deadlines), as specified in a federal operating permit issued pursuant to the requirements of this article,

shall apply to such sources.

D. Provisions concerning requests for applicability determination for MNSR permits are as follows:

1. An owner who is unsure of whether one or more sources at a major source belong in a category or subcategory for which the administrator has failed to promulgate an emission standard under 40 CFR Part 63 may, on or before an applicable § 112(j) deadline, request an applicability determination from the board by submitting an application meeting the requirements of 9 VAC 5-60-150 A by the applicable deadlines specified in subsection A, B, or C of this section.

2. In addition to meeting the requirements of subsections A, B, and C of this section, the owner of a new affected source may submit an application for a MNSR permit before construction, pursuant to 9 VAC 5-60-160.

E. Provisions concerning permit application review are as follows:

1. Each owner who is required to submit to the board a Part 1 MACT application that meets the requirements of 9 VAC 5-60-150 A for one or more sources in a category or subcategory subject to § 112(j) of the federal Clean Air Act shall also submit to the board a timely Part 2 MACT application for the same sources that meets the requirements of 9 VAC 5-60-150 B. Each owner shall submit the Part 2 MACT application for the sources in a particular category or subcategory no later than the applicable date specified in Table 6-3A. The submission date specified in Table 6-3A for Miscellaneous Organic Chemical Manufacturing shall apply to sources in each of the source categories listed in Table 6-3B. When the owner is required by this article to submit an application meeting the requirements of 9 VAC 5-60-150 A by a date that is after the date for a Part 2 MACT application for sources in the category or subcategory in question established by Table 6-3A, the owner shall submit a Part 2 MACT application meeting the requirements of 9 VAC 5-60-150 B within 60 additional days after the applicable deadline for submission of the Part 1 MACT application. Part 2 MACT applications will be reviewed by the board according to procedures established in 9 VAC 5-60-170. The resulting MACT determination will be incorporated into the source's federal operating permit according to procedures established under the federal operating permit program and any other regulations approved under the federal operating permit program.

2. Notwithstanding subdivision 1 of this subsection, the owner may request either an applicability determination or an equivalency determination by the board as provided in subdivisions 2 a and b of this subsection.

a. Each owner who submitted a request for an applicability determination pursuant to subdivision D 1 of this section on or before May 15, 2002,

which remains pending before the board on March 29, 2004, and who still wishes to obtain such a determination, shall resubmit that request by July 1, 2004, or by the date which is 60 days after the Administrator publishes in the Federal Register a proposed emission standard for the category or subcategory in question, whichever is later. Each request for an applicability determination that is resubmitted under this subdivision shall be supplemented to discuss the relation between the sources in question and the applicability provision in the proposed emission standard for the category or subcategory in question, and to explain why there may still be uncertainties that require a determination of applicability. The board will take action upon each properly resubmitted and supplemented request for an applicability determination within an additional 60 days after the applicable deadline for the resubmitted request. If the applicability determination is positive, the owner shall submit a Part 2 MACT application meeting the requirements of 9 VAC 5-60-150 B by the date specified for the category or subcategory in question in Table 6-3A. If the applicability determination is negative, then no further action by the owner is necessary.

b. As specified in subsections A and B of this section, an owner who has submitted an application meeting the requirements of 9 VAC 5-60-150 A may request a determination by the board of whether emission limitations adopted pursuant to a prior case-by-case MACT determination under the hazardous air pollutant new source review program that apply to one or more sources at a major source in a relevant category or subcategory are substantially as effective as the emission limitations that the board would otherwise adopt pursuant to § 112(j) of the federal Clean Air Act for the source in question. Such a request shall be submitted by the date for the category or subcategory in question specified in Table 6-3A. Any owner who previously submitted such a request under a prior version of this subdivision need not resubmit the request. Each request for an equivalency determination under this subdivision, regardless of when it was submitted, will be construed in the alternative as a complete application for an equivalent emission limitation under § 112(j) of the federal Clean Air Act. The process for determination by the board of whether the emission limitations in the prior case-by-case MACT determination are substantially as effective as the emission limitations that the board would otherwise adopt under § 112(j) of the federal Clean Air Act will include the opportunity for full public, EPA, and affected state review prior to a final determination. If the board determines that the emission limitations in the prior case-by-case MACT determination are substantially as effective as the emission limitations which the board would otherwise adopt under § 112(j) of the federal Clean Air Act, then the board will adopt the existing emission limitations in the permit as the emission limitations to effectuate § 112(j) of the federal Clean Air Act for the source in question. If more than three years remain on the current federal operating permit, the owner shall submit an application for a federal operating permit revision to make any conforming changes in the permit required to adopt the existing emission limitations as the § 112(j) of the federal Clean Air Act MACT emission limitations. If less than three years remain on the current federal operating permit, any required conforming changes will be made when the permit is renewed. If the board determines



that the emission limitations in the prior case-by-case MACT determination under the hazardous air pollutant new source review program are not substantially as effective as the emission limitations which the board would otherwise adopt for the source in question under § 112(j) of the federal Clean Air Act, the board will make a new MACT determination and adopt a federal operating permit incorporating an appropriate equivalent emission limitation under § 112(j) of the federal Clean Air Act. Such a determination constitutes final action for purposes of judicial review under the federal operating permit program provisions.

3. Within 60 days of submittal of the Part 2 MACT application, the board will notify the owner in writing whether the application is complete or incomplete. The Part 2 MACT application shall be deemed complete on the date it was submitted unless the board notifies the owner in writing within 60 days of the submittal that the Part 2 MACT application is incomplete. A Part 2 MACT application is complete if it is sufficient to begin processing the application for a federal operating permit addressing the requirements of this article. In the event that the board disapproves a permit application or determines that the application is incomplete, the owner shall revise and resubmit the application to meet the objections of the board. The board will specify a reasonable period in which the owner is required to remedy the deficiencies in the disapproved or incomplete application. This period may not exceed six months from the date the owner is first notified that the application has been disapproved or is incomplete.

4. Following submittal of a Part 1 or Part 2 MACT application, the board may request additional information from the owner. The owner shall respond to such requests in a timely manner.

5. If the owner has submitted a timely and complete application as required by this section, any failure to have a federal operating permit addressing the requirements of this article shall not be a violation of this article, unless the delay in final action is due to the failure of the applicant to submit, in a timely manner, information required or requested to process the application. Once a complete application is submitted, the owner shall not be in violation of the requirement to have a federal operating permit addressing the requirements of this article.

F. The federal operating permit shall contain an equivalent emission limitation (or limitations) for the relevant category or subcategory determined on a case-by-case basis by the board, or, if the applicable criteria in subpart D of 40 CFR Part 63 are met, the federal operating permit may contain an alternative emission limitation. For the purposes of the preceding sentence, early reductions made pursuant to § 112(i)(5)(A) of the federal Clean Air Act shall be achieved not later than the date on which the MACT standard should have been promulgated according to the source category schedule for standards.

1. The federal operating permit shall contain an emission standard or

emission limitation that is equivalent to existing source MACT and an emission standard or emission limitation that is equivalent to new source MACT for control of emissions of hazardous air pollutants. The MACT emission standards or limitations shall be determined by the board and shall be based on the degree of emission reductions that can be achieved if the control technologies or work practices are installed, maintained, and operated properly. The permit shall also specify the affected source and the new affected source. If construction of a new affected source or reconstruction of an affected source commences after a federal operating permit meeting the requirements of this article has been issued for the source, the new source MACT compliance dates shall apply.

2. The federal operating permit shall specify any notification, operation and maintenance, performance testing, monitoring, and reporting and recordkeeping requirements. In developing the federal operating permit, the board will consider and specify the appropriate provisions of subpart A of 40 CFR Part 63. The federal operating permit shall also include the information in subdivisions 2 a through c of this section.

a. In addition to the MACT emission limitation required by subdivision F 1 of this section, additional emission limits, production limits, operational limits or other terms and conditions necessary to ensure practicable enforceability of the MACT emission limitation;

b. Compliance certifications, testing, monitoring, reporting and recordkeeping requirements that are consistent with requirements established pursuant to the federal operating permit program and subsection H of this section; and

c. Compliance dates by which the owner shall be in compliance with the MACT emission limitation and all other applicable terms and conditions of the permit.

(1) The owner of an affected source subject to the requirements of this subdivision shall comply with the emission limitation(s) by the date established in the source's federal operating permit. In no case shall such compliance date be later than three years after the issuance of the permit for that source, except where the board issues a permit that grants an additional year to comply in accordance with § 112(i)(3)(B) of the federal Clean Air Act, or unless otherwise specified in § 112(i) of the federal Clean Air Act, or in subpart D of 40 CFR Part 63.

(2) The owner of a new affected source, as defined in the federal operating permit meeting the requirements of this article, that is subject to the requirements of this article shall comply with a new source MACT level of control immediately upon startup of the new affected source.

G. The board will issue a federal operating permit meeting the requirements of

this article within 18 months after submittal of the complete Part 2 MACT application.

H. In accordance with § 114(a)(3) of the federal Clean Air Act, monitoring shall be capable of demonstrating continuous compliance for each compliance period during the applicable reporting period. Such monitoring data shall be of sufficient quality to be used as a basis for directly enforcing all applicable requirements established under this article, including emission limitations.

I. Provisions concerning MACT emission limitations are as follows:

1. The owner of affected sources subject to subsections A, B, and C of this section shall comply with all requirements of this article that are applicable to affected sources, including the compliance date for affected sources established in subdivision F 2 c (1) of this section.

2. The owner of new affected sources subject to subsection C 1 of this section shall comply with all requirements of this article that are applicable to new affected sources, including the compliance date for new affected sources established in subdivision F 2 c (2) of this section.

TABLE 6-3A

SECTION 112(j) PART 2 APPLICATION DUE DATES

Due date	MACT standard
10/30/03	Combustion Turbines. Lime Manufacturing. Site Remediation. Iron and Steel Foundries. Taconite Iron Ore Processing. Miscellaneous Organic Chemical Manufacturing (MON). <sup>1</sup> Organic Liquids Distribution. Primary Magnesium Refining. Metal Can (Surface Coating). Plastic Parts and Products (Surface Coating). Chlorine Production. Miscellaneous Metal Parts and Products (Surface Coating) (and Asphalt/Coal Tar Application-Metal Pipes). <sup>2</sup>

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<sup>1</sup> Covers 23 source categories; see Table 6-3B.

<sup>2</sup> Two source categories.

4/28/04	Industrial Boilers, Institutional/ Commercial Boilers and Process Heaters. <sup>3</sup> Plywood and Composite Wood Products. Reciprocating Internal Combustion Engines. <sup>4</sup> Auto and Light-Duty Truck (Surface Coating).
8/13/05	Industrial Boilers, Institutional/ Commercial Boilers, and Process Heaters. <sup>5</sup> Hydrochloric Acid Production. <sup>6</sup>

TABLE 6-3B

# MISCELLANEOUS ORGANIC NESHAP (MON) SOURCE CATEGORIES

Manufacture of Paints, Coatings, and Adhesives.  
 Alkyd Resins Production.  
 Maleic Anhydride Copolymers Production.  
 Polyester Resins Production.  
 Polymerized Vinylidene Chloride Production.  
 Polymethyl Methacrylate Resins Production.  
 Polyvinyl Acetate Emulsions Production.  
 Polyvinyl Alcohol Production.  
 Polyvinyl Butyral Production.  
 Ammonium Sulfate Production-Caprolactam By-Product Plants.  
 Quaternary Ammonium Compounds Production.  
 Benzyltrimethylammonium Chloride Production.  
 Carbonyl Sulfide Production.  
 Chelating Agents Production.  
 Chlorinated Paraffins Production.  
 Ethylidene Norbornene Production.  
 Explosives Production.  
 Hydrazine Production.  
 OBPA/1,3-Diisocyanate Production.  
 Photographic Chemicals Production.  
 Phthalate Plasticizers Production.  
 Rubber Chemicals Manufacturing.

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<sup>3</sup> Includes all sources in the three categories Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn no hazardous waste.

<sup>4</sup> Includes engines greater than 500 brake horsepower.

<sup>5</sup> Includes all sources in the three categories Industrial Boilers, Institutional/Commercial Boilers, and Process Heaters that burn hazardous waste.

<sup>6</sup> Includes furnaces that produce acid from hazardous waste at sources in the category Hydrochloric Acid Production.

Symmetrical Tetrachloropyridine Production.

9 VAC 5-60-150. Application content for case-by-case MACT determinations.

A. The Part 1 application for a case-by-case MACT determination shall contain the following information:

1. The name and address (physical location) of the major source;
2. A brief description of the major source and an identification of the relevant source category;
3. An identification of the types of emissions points belonging to the relevant source category; and
4. An identification of any affected sources for which a hazardous air pollutant new source review program MACT determination has been made.

B. The following provisions govern the Part 2 application for a case-by-case MACT determination:

1. In compiling a Part 2 MACT application, the owner may cross-reference specific information in any prior submission by the owner to the board, but in cross-referencing such information the owner may not presume favorable action on any prior application or request which is still pending. In compiling a Part 2 MACT application, the owner may also cross-reference any part of a proposed emission standard for any category or subcategory which includes sources to which the Part 2 application applies.

2. The Part 2 application for a MACT determination shall contain the following information:

a. For a new affected source, the anticipated date of startup of operation.

b. Each emission point or group of emission points at the affected source that is part of a category or subcategory for which a Part 2 MACT application is required and each of the hazardous air pollutants emitted at those emission points. When the administrator has proposed an emission standard for a category or subcategory, such information may be limited to those emission points and hazardous air pollutants that would be subject to control under the proposed standard.

c. Any existing federal, state, or local limitations or requirements governing emissions of hazardous air pollutants from those emission

points that are part of a category or subcategory for which a Part 2 application is required.

d. For each identified emission point or group of affected emission points, an identification of control technology in place.

e. Any additional emission data or other information specifically requested by the board.

C. The Part 2 application for a MACT determination may, but is not required to, contain the following information:

1. Recommended emission limitations for the affected source and support information consistent with 40 CFR 63.52(f). The owner may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation;

2. A description of the control technologies that shall apply to meet the emission limitations including technical information on the design, operation, size, estimated control efficiency, and any other information deemed appropriate by the board, and identification of the affected sources to which the control technologies shall be applied; and

3. Relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

9 VAC 5-60-160. Preconstruction review procedures for new affected sources subject to 9 VAC 5-60-140 C 1.

A. The review process for new affected sources is as follows:

1. If the board requires an owner to obtain or revise a federal operating permit before construction of the new affected source, or when the owner chooses to obtain or revise a federal operating permit before construction, the owner shall follow the administrative procedures established under the federal operating permit program before construction of the new affected source.

2. If an owner is not required to obtain or revise a federal operating permit before construction of the new affected source (and has not elected to do so), but the new affected source is covered by any preconstruction or pre-operation review requirements established pursuant to the hazardous air pollutant new source review program, then the owner shall comply with those requirements. If the new affected source is not subject to the hazardous air pollutant new source review program, the board

will issue a MNSR permit in accordance with the MNSR permit procedures supplemented by the procedures set forth in subsections B through H of this section before construction or operation of the new affected source.

3. Regardless of the review process, the case-by-case MACT determination will be consistent with the principles established in 9 VAC 5-60-170. The application for the applicable new source review permit or a federal operating permit, permit modification, or administrative amendment, whichever is applicable, will include the documentation required by 9 VAC 5-60-150.

B. The board will provide for an enhanced review of MNSR permits used to implement case-by-case MACT determinations in accordance with the following review procedures and compliance requirements.

1. The board will notify the owner in writing as to whether the application for a case-by-case MACT determination is complete or whether additional information is required.

2. The board will approve an applicant's proposed control technology, or the board will notify the owner in writing of its intention to disapprove a control technology.

3. The owner may present in writing, within a time frame specified by the board, additional information, considerations, or amendments to the application before the board's issuance of a final disapproval.

4. The board will issue a preliminary approval or issue a disapproval of the application, taking into account additional information received from the owner.

5. A determination to disapprove any application will be in writing and will specify the grounds on which the disapproval is based.

6. Approval of an applicant's proposed control technology will be set forth in a MNSR permit as described in 9 VAC 5-60-140 F.

C. The board will provide opportunity for public comment on the preliminary MNSR permit prior to issuance, including, at a minimum,

1. Availability for public inspection in at least one location in the area affected of the information submitted by the owner and of the board's tentative determination;

2. A period for submittal of public comment of at least 30 days;

3. A notice by prominent advertisement in the area affected of the location of the source information and analysis specified in 9 VAC 5-60-140 F. The form and content of the notice will be substantially equivalent to that found in 9 VAC 5-80-270 or 9 VAC 5-80-670; and

4. An opportunity for a public hearing, if one is requested. The board will give at least 30 days notice in advance of any hearing.

D. The board will send copies of the preliminary permit (in time for comment) and final permit required by subsection C of this section to the administrator through the appropriate regional office, to affected states, and to all other state and local air pollution control agencies having jurisdiction in the region in which the new source would be located. The board will provide EPA with a review period for the final permit of at least 45 days, and will not issue the final MNSR permit until EPA objections are satisfied.

E. An owner of a major source that is subject to a case-by-case MACT determination shall comply with notification, operation and maintenance, performance testing, monitoring, reporting, and recordkeeping requirements established under 9 VAC 5-60-140 F 2, under the federal operating permit program, and at the discretion of the board, under subpart A of 40 CFR Part 63. The board will provide the EPA with the opportunity to review compliance requirements for consistency with requirements established pursuant to the federal operating permit program during the review period under subsection D of this section.

F. If the board requires a new source review permit for a new source case-by-case MACT determination under this article, such requirement will not necessitate a determination under subpart E of 40 CFR Part 63.

9 VAC 5-60-170. Maximum achievable control technology (MACT) determinations for affected sources subject to case-by-case determination of equivalent emission limitations.

A. The board will determine whether the Part 1 and Part 2 MACT application is complete or an application for a MNSR permit is approvable. In either case, when the application is complete or approvable, the board will establish hazardous air pollutant emissions limitations equivalent to the limitations that would apply if an emission standard had been issued in a timely manner under § 112(d) or (h) of the federal Clean Air Act. The board will establish these emissions limitations consistent with the following requirements and principles:

1. Emission limitations will be established for the equipment and activities within the affected sources within a source category or subcategory for which the deadline in § 112(j) of the federal Clean Air Act has passed.

2. Each emission limitation for an existing affected source will reflect



the maximum degree of reduction in emissions of hazardous air pollutants (including a prohibition on such emissions, where achievable) that the board, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable by affected sources in the category or subcategory for which the deadline in § 112(j) of the federal Clean Air Act has passed. This limitation will not be less stringent than the MACT floor which will be established by the board according to the requirements of § 112(d)(3)(A) and (B) of the federal Clean Air Act and will be based upon available information.

3. Each emission limitation for a new affected source will reflect the maximum degree of reduction in emissions of hazardous air pollutants (including a prohibition on such emissions, where achievable) that the board, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable. This limitation will not be less stringent than the emission limitation achieved in practice by the best controlled similar source which will be established by the board according to the requirements of § 112(d)(3) of the federal Clean Air Act. This limitation will be based upon available information.

4. The board will select a specific design, equipment, work practice, or operational standard, or combination thereof, when it is not feasible to prescribe or enforce an equivalent emission limitation due to the nature of the process or pollutant. It is not feasible to prescribe or enforce a limitation when the administrator determines that hazardous air pollutants cannot be emitted through a conveyance designed and constructed to capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any federal, state, or local law, or the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.

5. Nothing in this article will prevent the board from establishing an emission limitation more stringent than required by federal regulations.

B. The owner shall submit additional copies of its Part 1 and Part 2 MACT application for a federal operating permit, permit revision, or MNSR permit, whichever is applicable, to the EPA at the same time the material is submitted to the board.

9 VAC 5-60-180. Requirements for case-by-case determination of equivalent emission limitations after promulgation of a subsequent MACT standard.

A. If the administrator promulgates a MACT standard that is applicable to one or more affected sources within a major source before the date a federal operating permit application under this subsection is approved, the permit will contain the promulgated standard rather than the emission limitation determined under 9 VAC 5-60-140, and the owner shall comply with the promulgated standard by the compliance date in the

promulgated standard.

B. If the administrator promulgates a MACT standard under § 112 (d) or (h) of the federal Clean Air Act that is applicable to a source after the date a federal operating permit is issued pursuant to 9 VAC 5-60-140 or 9 VAC 5-60-160, the board will incorporate requirements of that standard in the permit upon its next renewal. The board will establish a compliance date in the revised federal operating permit that assures that the owner shall comply with the promulgated standard within a reasonable time, but not longer than 8 years after such standard is promulgated or 8 years after the date by which the owner was first required to comply with the emission limitation established by the federal operating permit, whichever is earlier. However, in no event will the period for compliance for existing sources be shorter than that provided for existing sources in the promulgated standard.

C. Notwithstanding the requirements of subsections A and B of this section, the requirements of subdivisions 1 and 2 of this subsection apply.

1. If the administrator promulgates a MACT standard under § 112(d) or (h) of the federal Clean Air Act that is applicable to an affected source after the date a federal operating permit application is approved under 9 VAC 5-60-140 or 9 VAC 5-60-160, the board is not required to change the emission limitation in the federal operating permit to reflect the promulgated standard if the board determines that the level of control required by the emission limitation in the federal operating permit is substantially as effective as that required by the promulgated standard pursuant to 40 CFR 63.1 (e).

2. If the administrator promulgates an emission standard under § 112(d) or (h) of the federal Clean Air Act that is applicable to an affected source after the date a permit application is approved under 9 VAC 5-60-140 or 9 VAC 5-60-160, and the level of control required by the promulgated standard is less stringent than the level of control required by any emission limitation in the prior MACT determination, the board is not required to incorporate any less stringent emission limitation of the promulgated standard in the federal operating permit and may in its discretion consider any more stringent provisions of the MACT determination to be applicable legal requirements when issuing or revising such a federal operating permit.

#### HISTORICAL NOTES:

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